

MOTION DETECTION VIA IMAGE ALIGNMENT

ABSTRACT OF THE DISCLOSURE

5 Pixels of an image are classified as being stationary or moving, based on the gradient of
the image in the vicinity of each pixel. The values of corresponding pixels in two sequential
images are compared. If the difference between the values is less than the image gradient about
the pixel location, or less than a given threshold value above the image gradient, the pixel is
classified as being stationary. By classifying each pixel based on the image gradient in the
10 vicinity of the pixel, the sensitivity of the motion detection classification is reduced at the edges
of objects, and other regions of contrast in an image, thereby minimizing the occurrences of
ghost artifacts caused by the misclassification of stationary pixels as moving pixels.

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